

Amendments to the Claims

1. (currently amended) A video system comprising at least two different and non-compatible video-on-demand applications, a video-on-demand server and a remote client, a first video-on-demand application executing on the server, the first video-on-demand application employing a first video-on-demand application control protocol comprising control data communicated to control a video-on-demand application, the client employing a second video-on-demand application control protocol comprising control data communicated to control a video-on-demand application, wherein the first video-on-demand application control protocol employed by the first video-on-demand application at the server is different and non-compatible with the second video-on-demand application control protocol employed by the client, the system further including a proxy interposed between the server and the client, the proxy including means for translating between the different and non-compatible first and second video-on-demand application control protocols, wherein translating comprises translating control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application, wherein the server and client can communicate control data through the proxy even if the control data in the first and second protocols are different, and wherein change to either the first or second video-on-demand application control protocol can be accommodated by a change to the proxy rather than to the client or server, respectively and wherein the control data communicated according to the first and second video-on-demand protocols is delivered via data packets transmitted according to a same TCP/IP network protocol.

2. (previously presented) The system of claim 1 wherein the proxy further includes means for translating between at least one of said first and second video-on-demand application control protocols and a third video-on-demand application control protocol comprising control data communicated to control a video-on-demand application and different from said first and second video-on-demand application control protocols, wherein the same proxy can be used in different server/client environments.

3. (original) The system of claim 1 wherein the proxy includes means for ameliorating aberrant behavior in at least one of said server or client.

4. (previously presented) The system of claim 3 wherein the proxy includes means for detecting a predetermined input communication in an input video-on-demand application control protocol, and issuing an output communication in an output video-on-demand application control protocol that does not exactly correspond to the input communication.

5.-16. (canceled)

17. (currently amended) In a video-on-demand system including at least two non-compatible video-on-demand applications, plural clients receiving on-demand video originating from at least one video server communicating according to a first video-on-demand server application control protocol and wherein at least one of said plural clients communicates according to a second video-on demand server application control protocol incompatible with the first video-on-demand server application control protocol, a proxy server computer interposed between the video server and said plural clients, the proxy server performing a method comprising:

assigning a first transmission channel to a first client to transmit an on-demand video thereto;

assigning a second transmission channel to a second client to transmit an on-demand video thereto;

using control data of the first video-on-demand server application control protocol, instructing the video server to transmit to the first client on the first transmission channel and instructing the video server to transmit to the second client on the second transmission channel; and

using control data of the second video-on-demand server application control protocol, instructing the first client to receive on the first transmission channel and instructing the second client to receive on the second transmission channel;

wherein the proxy server translates control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application into control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible components into an existing

~~system by providing translation between components communicating according to two or more non-compatible video-on-demand applications receives and transmits instructions with the video server, with the first client, and with the second client according to the same network control protocol.~~

18. (previously presented) The method of claim 17, wherein the proxy server reassigns the first client to a third transmission channel at a point between the beginning and end of the first client's on-demand video, so as to manage channel resources.

19.-24. (canceled)

25. (currently amended) In a video-on-demand system comprising two or more non-compatible video-on-demand applications, plural video-on-demand clients requesting video programs according to a first video server control protocol of a first video-on-demand application, and a head-end serving video programs according to a second video server control protocol of a second video-on-demand application, interposing a proxy server computer between the head-end and the plural clients, the proxy server performing a method comprising:

from a client, receiving control data representing a video server control action in the first protocol of the first video-on-demand application;

translating the received control data into control data representing a video control action in the second control protocol of the second video-demand application; and

sending the translated control data to the head-end serving video programs according to the second video server control protocol of the second video-on-demand application;

wherein the proxy server translates between control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application and control data compatible with the second video-on-demand application but not compatible with the first video-on-demand application thereby facilitating integration of non-compatible video-on-demand applications into an existing system by providing translation between components communicating according to two or more non-compatible video-on-demand applications.

26. (currently amended) The system of claim 25, further comprising plural video-on-demand clients requesting video programs according to the second video server control protocol of the second video-on-demand application and the method further comprises:

from a second client, receiving control data representing a video server control action in the second protocol of the second video-on-demand application; and

sending to the head-end, the control data received from the second client without translation; wherein the proxy server communicates with the client in the first protocol of the first video-on-demand application, and the proxy server communicates with the second client in the second protocol of the second video-on-demand application.

27. (currently amended) The system of claim 25, further comprising a second video server at the head-end, wherein the second video server serves video programs according to the first video server control protocol of the first video-on-demand application, and the method further comprises:

from a second client, receiving control data representing a video server control action in the first protocol of the first video-on-demand application; and

sending to the second video server without translation, the control data received from the second client.

28. (currently amended) A computer-readable medium comprising instructions for performing a method comprising:

receiving according to a first network control protocol, control data from a client requesting video programs according to a first video-on-demand server control protocol of a first video-on-demand application;

translating the received control data into control data representing a video control action in a second video-on-demand server control protocol of a second video-on-demand application; and

sending, according to the first network control protocol, the translated control data to a head-end serving video-on-demand programs according to the second video-on-demand server control protocol of the second video-on-demand application;

wherein the method translates to and from control data of the first video-on-demand application and control data of the second video-on-demand application thereby facilitating video-on-demand

control between two or more components communicating according to two or more non-compatible video-on-demand applications.

29. (currently amended) The computer readable medium of claim 28, wherein the method further comprises:

receiving control data from a second client requesting video programs according to the second video-on-demand server control protocol of the second video-on-demand application; and

sending without translation, the control data from the second client to the head-end serving video-on-demand programs according to the second video-on-demand server control protocol.

30. (currently amended) The computer readable medium of claim 28, wherein the method further comprises:

receiving control data from a second client requesting video programs according to the first video-on-demand server control protocol of the first video-on-demand application; and

sending without translation, the control data to a second video server at the head-end, wherein the second video server serves video-on-demand programs according to the first video-on-demand server control protocol of the first video-on-demand application.

31. (currently amended) A computer-readable medium comprising instructions for performing a method of translating control data for incompatible video-on-demand applications, the method comprising:

receiving from a first client communicating application control data according to a first video-on-demand application, application control data comprising on-demand video control;

assigning a first transmission channel to the first client;

sending to a head-end communicating application control data according to a second video-on-demand application, application control data comprising instructions to transmit on-demand video on the first transmission channel;

sending to the first client communicating application control data according to the first video-on-demand application, application control data comprising instructions to receive on-demand video on the first transmission channel;

receiving from a second client communicating application control data according to the first video-on-demand application, application control data comprising on-demand video control;
assigning a second transmission channel to the second client;
sending to the head-end communicating application control data according to the second video-on-demand application, application control data comprising instructions to transmit on-demand video on the second transmission channel; and
sending to the second client communicating application control data according to the first video-on-demand application, application control data comprising instructions to receive on-demand video on the second transmission channel:
wherein the method translates between control data compatible with the first video-on-demand application but not compatible with the second video-on-demand application and control data compatible with the second video-on-demand application but not the first video-on-demand application and the sent and received application control data comprising the first and second video-on-demand application is transmitted according to a same network communication protocol.

32. (currently amended) A method for assigning video-on-demand transmission channels to transmit on-demand video programming from a head-end communicating control data according to a first on-demand video application to plural clients communicating control data according to a second on-demand video application, the method performed by a proxy server computer receiving and sending control data, the method comprising:

receiving from a first client, a second application control data comprising on-demand video control;
assigning a first transmission channel to the first client;
sending to the head-end, a first application control data comprising instructions to transmit on-demand video on the first transmission channel;
sending to the first client, a second application control data comprising instructions to receive on-demand video on the first transmission channel;
receiving from a second client, a second application control data comprising on-demand video control;
assigning a second transmission channel to the second client;

sending to the head-end, a first application control data comprising instructions to transmit on-demand video on the second transmission channel;

and sending to the second client, a second application control data comprising instructions to receive on-demand video on the second transmission channel;

wherein the head-end was designed to communicate with clients communicating control data according to the first on-demand video application; and

wherein the proxy server translates between control data compatible with the first on-demand video application but not compatible with the second on-demand video application and control data compatible with the second on-demand video application but not compatible with the first on-demand video application, the translation facilitating integration of components communicating according to two or more non-compatible on-demand video applications. the first and second application control data control video on-demand applications and do not control the network protocol used to send the application control data between the head-end and the first or second client.

33. (new) In a video system with several different brands of video-on-demand applications, each such different brand operating according to a different communications protocol, the system comprising:

plural clients and plural servers, each client and each server communicating according to a single video on demand application, at least one client communicating according to a video on demand application incompatible with a video on demand application of at least one server; and

a proxy server translating between clients and servers communicating according to incompatible video on demand applications;

wherein the proxy server translates between clients and servers communicating according to incompatible applications, such that control data of a first application employed by a client and control data of a second application expected by the server are translated and the proxy server facilitates integration of otherwise non-compatible components into the video system.

34. (new) The existing system of claim 33, wherein the several different brands include at least one of Seachange, Vivid and Netshow Theater.

35. (new) The video system of claim 33 wherein at least one communications protocol comprises DAVEC or DSMTC.